

MCA TORONTO

MECHANICAL CONTRACTORS ASSOCIATION OF TORONTO

SAFETY

UPDATE FROM THE MCA TORONTO SAFETY COMMITTEE



Tips for Working in the Summer Environment

As the temperatures begin to soar towards true summer heat levels, construction workers face the challenges of staying safe working in the extreme conditions. Working under the scorching sun requires careful planning and precautions to stay safe. Here are some tips to beat the heat, stay health and maintain productivity during those long, hot summer days:

1. Stay Hydrated: Drink plenty of water before and during your work shift. Avoid alcohol or liquids containing strong sugar content.

2. Wear Appropriate Clothing: Choose light-coloured and lightweight clothes that fits under the work standard.

3. Take Frequent Breaks: Shorten

the amount of time working directly under the sun, and take frequent, small breaks in a cool place, such as a shaded area or indoors.

4. Use Sun Protection: Apply sunscreen throughout the day and use of a hat/hardhat to prevent direct sun exposure.

5. Know the Signs: Be aware of the signs of heat-related illnesses, such as muscle cramps, fatigue, dizziness and confusion.

Let's remember that taking precautions or measures can significantly reduce your risk of heat exhaustion, heat stroke and other heat related illnesses.

Remember, be safe, and look out for others as well.

– Carlos Ferreira, Bibby Ste-Croix

OUR VISION IS:

To provide awareness, education and training, creating positive work environments with reduced risk.

OUR MISSION IS:

To improve the health and safety of all members of the Mechanical Contractors Association of Toronto

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Ontario what's new

MINISTRY OF LABOUR, TRAINING AND SKILLS DEVELOPMENT

MLITSD Health & Safety Campaigns in 2024

Ministry of Labour, Immigration, Training and Skills Development (MLITSD) health and safety inspection initiatives and campaigns are part of the Ministry's commitment to meeting requirements outlined in its five-year occupational health and safety strategy – Prevention Works. Although the Ministry announces these campaigns and initiatives in advance, it does not identify individual workplaces in advance of conducting these inspections. This initiative is intended to raise awareness of workplace hazards and promote compliance with the Occupational Health and Safety Act (OHSA) and its regulations.

The MLITSD campaigns for 2024 include the following:

Falls from Heights in Single Family Residential and Multi-Family Residential Buildings

The campaign includes:

- Education, outreach and awareness supported by the Infrastructure Health and Safety Association.
- Focused inspections.

Struck-by material, equipment and vehicles

The campaign includes:

- Education, outreach and awareness supported by the Infrastructure Health and Safety Association.
- Focused inspections.

Prevention of slips, trips and falls

The campaign includes:

- Education, outreach and awareness are supported by the Public Services Health and Safety Association.

Material Handling

The campaign includes:

- Education, outreach and awareness supported by the Workplace Safety and Prevention Services.
- Focused inspections.

Worker exposures to chemical agents in the workplace

The campaign includes:

- Education, outreach and awareness are supported by the following:
 - Infrastructure Health and Safety Association (IHSA).
 - Public Services Health and Safety Association (PSHSA).
 - Workplace Safety North (WSN).
 - Workplace Safety and Prevention Services (WSPS).

WHMIS training based on the amended Hazardous Products Regulations

The campaign includes:

- Education, outreach and awareness are supported by the following:
 - Infrastructure Health and Safety Association (IHSA).
 - Public Services Health and Safety Association (PSHSA).
 - Workplace Safety North (WSN).
 - Workplace Safety and Prevention Services (WSPS).

For more information, please visit the [MLITSD website](#).

Tower Crane Hazard Alert from MLITSD

In the past four months, Ontario's Ministry of Labour, Immigration, Training and Skills Development (MLITSD) has investigated two near-miss incidents involving the hoist reduction gear assemblies on tower cranes.

Each event occurred when the gear assembly's main shaft bearing failed, causing the shaft to become misaligned. This in turn caused the gears

controlling the hoist to disengage, allowing the hoisting drum to unspool freely and drop the crane's load. These incidents put workers who work near cranes at serious risk of traumatic injury or death. It is, therefore, important that tower crane owners and operators ensure that thorough inspection – and maintenance, if necessary – is carried

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New Heat Stress Toolkit

Heat stress effects thousands of Canadian workers every year. It has both short and long-term health effects.

Due to climate change, extreme temperatures are becoming more frequent and concerns about heat stress and resulting occupational illness are on the rise.

To support employers and workers in their efforts to prevent heat stress, Occupational Health Clinics for Ontario Workers (OHCOW), in collaboration with the Centre for Research in Occupational Safety & Health, have launched a comprehensive Heat Stress Toolkit.

The toolkit resources promote the dangers of working in heat and can guide workplaces in creating their own heat stress emergency response plan. It includes the following three guides:

- The Updated Heat Stress Awareness Guide
- A New Prevention Tools & Strategies Guide
- A New Physiological Monitoring Guide
- Videos
- An updated Online Heat Stress Calculator

The basis of the toolkit is the Heat Stress Awareness Guide developed by the Occupational Health and Safety Council of Ontario (OHSCO) in 2009. With the support of the Ontario Health and Safety Prevention system (through the Occupational Illness Prevention Steering Committee) and local labour unions, it was enhanced to include and address items specifically identified as needing improvement/revision.

[Access the toolkit now.](#)

Tower Crane Hazard Alert

out on the hoist reduction gear assemblies and the lubrication system for gear bearing of their cranes.

Download this MLITSD alert to learn more about conducting an inspection of a tower crane's hoist reduction gear assembly.



UA LOCAL 46
SUPERIOR PIPING SKILLS SINCE 1890

News Update

SUICIDE

Peer Support Skills and
Mental Health Literacy

Not what you would be expecting from a Training Department update, but it is a topic that has, unfortunately, moved into the forefront on a regular basis within Local 46 and society in general. Since Labour Day 2023, we have had three members kill themselves – a situation that is an epic tragedy. To lose one person is heartbreaking, but six, in total, in 2023 is an epidemic.

The Training Department has identified a program – Vital Cog – that will assist in identifying and helping individuals who are having mental health challenges. The Vital Cog program has been designed for the construction industry, and addresses some of the unique challenges that individuals in the industry face as part of their daily roles.

The basic program looks to proactively address the early warning signs of suicide in the workplace. It also provides guidance to individuals on how to become an active, empathetic listener; to provide an ear for someone who is looking to reach out in their time of need. It shows us how to be non-judgmental and how to offer support to these individuals, such as the

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WORKING AT HEIGHTS

Understanding Falls in the Pipe Trades

Falls are one of the leading causes of injuries and fatalities in the construction industry, and the pipe trades are no exception. In Ontario, falls account for a significant portion of workplace incidents, highlighting the need for heightened awareness and stringent safety measures. According to the 2016 WSIB Statistical Report, falls represented 18 per cent of all workplace fatalities in Ontario from 2007 to 2016. This statistic underscores the critical importance of fall prevention in the construction sector. Working at Heights training has been mandatory in construction since 2015, yet we still are not seeing a decline in fatalities from falls. Why?

Perhaps if we looked at the mechanism of the falls, the first flag is the workers' fall protection harness/lanyard and anchor have not failed. If the equipment is functional, you must check if it was properly worn or connected. The next flag is the guardrails, bump lines and coverings over openings. These don't fail, they just aren't installed.

WHAT CONSTITUTES A FALL?

A fall in the workplace can occur in various ways and generally falls into one of two categories:

1. **Falls from Height:** These involve falls from ladders, scaffolding, roofs or any elevated work surface. In the pipe trades, workers frequently operate at heights, installing piping systems in ceilings, on rooftops or on elevated platforms.

2. **Falls on the Same Level:** These occur when workers trip or slip and fall on the same level, often due to wet surfaces, loose cables, or debris on the floor.

STATISTICS ON FALLS IN CONSTRUCTION

- In Ontario, falls are a leading cause of injury in construction, second only to motor-vehicle incidents.

- The Infrastructure Health and Safety Association (IHSA) reports that falls are responsible for over 20 per cent of lost-time injuries in the construction industry.

- Within the pipe trades, falls from ladders and scaffolding are particularly prevalent, accounting for a significant percentage of fall-related injuries.

EXAMPLES OF FALL INCIDENTS IN THE PIPE TRADES

1. **Ladder Falls:** A pipefitter was



injured after falling from a ladder while installing overhead piping. The ladder was not properly secured and the worker lost balance, resulting in a fractured arm.

2. **Scaffolding Falls:** During the installation of a piping system on a commercial building, a plumber fell from scaffolding that was not adequately guarded. The lack of proper guardrails and the worker's failure to use a safety harness led to a serious back injury.

3. **Falls Through Openings:** A pipefitter working on a multi-storey building fell through an unguarded floor opening. The absence of temporary covers or guardrails around the opening resulted in the worker suffering multiple injuries.

PREVENTION MEASURES FOR FALLS IN THE PIPE TRADES

Preventing falls requires a combination of proper planning, use of personal protective equipment (PPE), and adherence to safety protocols. Here are some key prevention measures:

1. **Use of Proper Equipment:**

- Ensure ladders are in good condition and properly secured before use.
- Use scaffolding that is equipped with guardrails and toe boards.
- Implement fall arrest systems, such as safety harnesses and lifelines, especially when working at heights.

2. **Site Planning and Organization:**

- Conduct thorough risk assessments to identify potential fall hazards.
- Ensure that work areas are clean and free of tripping hazards, such as loose cables and debris.
- Use temporary covers or guardrails around floor openings and other potential fall hazards.

3. **Worker Training and Awareness:**

- Provide comprehensive training on the proper use of ladders, scaffold-

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IHSA staff are proud to be among the many representatives of Ontario's workplace health and safety system participating in Steps for Life events in 2024. From April 27 to May 11, 2024, these five-kilometre walks raise awareness and funds to help families affected by a life-altering workplace injury, occupational disease, or death. Steps for Life events were recently held in Kingston, Thunder Bay and Toronto - with Minister of

Steps for Life Walks Across Ontario



Dr. Joel Moody in attendance. More events throughout the province are scheduled for the first two weekends in May. Learn more, register or make a donation.

Labour, Immigration, Training and Skills Development David Piccini and Chief Prevention Officer

Fall Awareness Week – May 6-10, 2024

From May 6 to 10, 2024, IHSA joined workplaces across Ontario to promote Falls Awareness Week (FAW), an event dedicated to preventing and spreading awareness of falls and fall hazards.

Throughout the week, IHSA shared daily resources that would help work-

places prevent falls, which are one of the leading causes of death and critical injury in the construction industry.

To access these resources - including the 2024 Fall Prevention Toolkit, safety talks, podcasts and videos - visit the IHSA Falls Awareness Week page.

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Understanding Falls in the Pipe Trades

ing, and fall arrest systems.

- Educate workers on the importance of maintaining three points of contact when climbing ladders.

- Conduct regular safety meetings and drills to reinforce fall prevention practices.

4. Conduct Regular Inspections and Maintenance:

- Perform regular inspections of all equipment, including ladders, scaffolding and fall protection systems.

- Ensure that any damaged or defective equipment is repaired or replaced immediately.

- Maintain a proactive approach to identifying and addressing potential fall hazards.

CONCLUSION

Complacency seems to be the main cause of falls, we just don't see the need to take any preventative actions for a lot of reasons (costs, time, materials not handy, etc.). We are never going to improve the fall fatalities in Ontario until we get the buy-in from all stakeholders, and stop thinking it only happens to the other guy, not me. Fall aware-

ness and prevention are crucial in the pipe trades. By understanding the risks associated with falls and implementing effective safety measures, we can significantly reduce the incidence of all-related injuries and fatalities. The key to preventing falls lies in the combination of proper equipment use, thorough site planning, continuous worker training, and regular maintenance and inspections.

In the pipe trades, where working at heights and navigating complex work environments are common, a commitment to fall prevention can make a profound difference in worker safety. By fostering a culture of safety and vigilance, the construction industry can ensure a safer working environment for all members.

For more detailed information on fall prevention and safety protocols, refer to resources provided by the Infrastructure Health and Safety Association (IHSA) and the Ontario Ministry of Labour, Immigration, Training and Skills Development.

- Ian Bergeron, B. Tech., CET, CRSP,
Paralegal, Sprint Mechanical Inc.

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SUICIDE

Peer Support Skills and
Mental Health Literacy



U.A. Member Assistance Plan, or in extreme cases, the 988 suicide help line, which became active as of November 30, 2023. This helpline is available across Canada and the United States, and will connect you to the help center in your area.

Although Vital Cog is run out of the University of Colorado, it is available across the continent to anyone interested in learning more about the issue. The training you receive will not only help on the jobsite, but it can also help at home. In the classes I have delivered so far, I have found that from 33 to 50 per cent of the individuals in the class (trade school apprentices) have had exposure to suicide in their social group. For further information please feel to contact me or visit their website here.

If you are suffering with challenges to your mental well-being, please reach out. You can contact me directly, speak with a friend or contact the U.A. Member Assistance Plan. There is help available for your challenges, just in the same way there is help for diabetes and high-blood pressure.

If you are in crisis, please reach out to 988 Suicide and Crisis Lifeline on your cell phone.

- Vince Kacaba, Director of Training,
U.A. Local 46 JTAC

Latest IHSA Safety Talk Videos Now Available

IHSA's expert-led video safety talks offer crucial information on workplace best practices and the safe use of common equipment. IHSA's latest videos look at traffic control during roadside work, as well as the differences between a signaller and a traffic control person on jobsites. Watch these and many other videos on the [IHSA YouTube Channel](#).

New ISHA Safety Podcast Episodes

The IHSA Safety Podcast is a free podcast that explores best practices, resources and training to control and eliminate health and safety hazards in the industries that IHSA serves.

Episode 80 focuses on women in construction health and safety. It highlights the experiences of three members of IHSA's management team, who talk about using the hierarchy of controls to tackle gender bias in construction, the role management plays in encouraging equality and the value female workers bring to the industry. [LISTEN NOW](#)



Episode 81 tells the story of Dean Maguire, who lost his life while working at a construction jobsite. Members of Dean's family share their experiences of grief, the importance of prioritizing workplace safety and their involvement with Threads of Life, a charity that supports families affected by workplace tragedies. [LISTEN NOW](#)



Access the [IHSA Safety Podcast online](#) or find it using your preferred podcast app.

WORKPLACE HAZARDS

Struck-By Incidents in Ontario Construction

Struck-by injuries are a significant concern in the construction industry, accounting for 13 per cent of all workplace fatalities in Ontario from 2007 to 2016, according to the 2016 WSIB Statistical Report. This makes struck-by incidents the third-highest cause of work-related deaths, following motor-vehicle incidents (36 per cent) and falls (18 per cent).

WHAT ARE STRUCK-BY INJURIES?

Struck-by injuries occur when workers are hit by tools, materials, equipment or vehicles. These incidents can happen in various ways and are a leading cause of injury in construction. The term "struck-by" covers a range of scenarios:

1. Moving Vehicles and Equipment:

The most serious struck-by injuries often involve moving vehicles or equipment on the job site. For example:

- A construction worker was fatally injured when a reversing dump truck struck him. Despite wearing high-visibility clothing, the driver did not see him due to blind spots and lack of effective communication.

- An operator of a forklift was injured when the load shifted and fell on him, illustrating the importance of secure load handling and proper training for equipment operators.

To mitigate these risks, controlling vehicles and traffic around a job site is crucial. For more detailed information, visit the Traffic Control topic page provided by the Ontario prevention system.

2. Flying or Falling Objects:

Many struck-by injuries are caused by objects that are in motion, such as tools or materials that fall from heights or are ejected from equipment. Examples include:

- A carpenter sustained a head injury when a piece of lumber fell from scaffolding above him. The incident highlighted the need for securing materials, and ensuring that protective barriers or nets are in place.

- A worker using a nail gun was struck by a nail that ricocheted off a hard surface. Proper training on tool usage and ensuring the work area is clear of hard obstructions are essential safety measures.

3. Slips, Trips and Falls:

Workers who slip or fall may also suffer struck-by injuries from the tools or materials



they are carrying. These incidents can compound injuries, making them more severe. For example:

- A plumber slipped on a wet surface and fell, causing the wrench he was carrying to strike him in the face, resulting in a broken nose. This incident underscores the importance of maintaining clean and dry work areas, and carrying tools securely.

HIGH-RISK RATE GROUPS

Struck-by injuries are prevalent across all industries, but in Ontario, certain rate groups experience a higher incidence. These include:

- **General Trucking:** Frequent interactions with heavy vehicles and equipment increase the risk.

- **Home Building:** The dynamic and often crowded nature of a home construction site contributes to a higher likelihood of struck-by incidents.

- **Mechanical and Sheet Metal Work:** Handling heavy and sometimes sharp materials increases the risk of being struck.

- **Lumber and Builder's Supply:** The movement of large quantities of materials and equipment in supply yards presents a significant risk.

Within these groups, struck-by incidents often result in injuries to the eyes, which are particularly vulnerable. For example, a pipefitter suffered a severe eye injury when a piece of welding slag he was chipping splintered and flew into his eye, despite wearing safety glasses (should have had goggles on).

PREVENTION AND SAFETY MEASURES

To reduce the risk of struck-by injuries, employers and workers should implement comprehensive safety measures, including:

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Struck-By Incidents in Ontario Construction

• **Personal Protective Equipment (PPE):**

Workers should wear appropriate PPE, such as hard hats, safety glasses/goggles and high-visibility clothing to protect against head and eye injuries, and to be more visible on low light projects. For instance, a plumber can avoid serious injury when a hard hat protected him from a hanging falling.

• **Site Safety Planning:** Proper planning and lay-out of construction sites can minimize the risk of struck-by incidents. This includes clear marking of vehicle routes and pedestrian zones. A well-organized site with designated walkways for workers and separate routes for vehicles can prevent many accidents.

• **Tool and Material Management:** Ensuring tools and materials are securely stored and handled can prevent them from becoming projectiles or falling hazards. Regular inspections and proper stacking of materials are critical practices. When working on a scissor lift, how do you secure the area below? A very common practice that needs to be controlled is keeping tools/materials on the top of step ladders. Too often a worker “forgets” he has a tool on the top, moves the ladder and is “struck-by” that tool.

• **Worker Training:** Ongoing training for workers on the risks of struck-by incidents and safe practices can significantly reduce these injuries. For example, training workers to install toe boards on guard rails or to keep materials aware from sleeve openings or edges on floors. The Infrastructure

Health and Safety Association (ISHA) has a number of excellent toolbox talks on struck-by incidents. Training workers to recognize the hazards of the work that can cause a struck by will make a significant impact on reducing the number and severity of these incidents. Simple unforeseen issues, such as stacking materials, such as pipe or duct work on their ends is unstable, and can tip striking someone. PSI's, JHA's, HA, are all common ways of communicating to the workers of the hazards of the job. But, do you spend anytime looking for “stuck-by” hazards?

CONCLUSION

Struck-by incidents represent a major safety concern in the construction industry in Ontario. By understanding the risks and implementing effective safety measures, employers and workers can work together to reduce the incidence of these potentially fatal injuries. For further information on preventing struck-by injuries and related safety topics, refer to resources such as the Traffic Control and Slips, Trips, and Falls topic pages provided by the IHSA.

Ensuring a safer work environment requires constant vigilance and proactive measures to protect workers from the dangers of struck-by incidents. By adopting best practices, utilizing appropriate protective equipment and fostering a culture of safety, the construction industry can significantly reduce the occurrence of these hazardous events.

– Ian Bergeron, B. Tech., CET, CRSP,
Paralegal, Sprint Mechanical Inc.



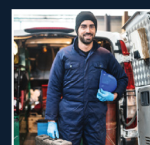
Construction Buyers Learn About COR®

IHSA recently welcomed more than 75 representatives of some of Ontario's largest buyers of construction projects for a wide-ranging discussion on the importance of occupational health and safety management systems (OHSMS) in light of the *R. v. Greater Sudbury (City)* Supreme Court decision. The event highlighted important information and best practices for buyers who may be considering requiring a COR®- or ISO 45001-certified OHSMS as a condition of contract. Read the [IHSA recap](#) of this important forum.



Substance Use in the Trades: Being Aware

Increase your awareness about the impacts of stigma, and the importance of a healthy and safe workplace



in this free program from the Canadian Centre for Occupational Health and Safety (CCOHS).

In 2023, the Canadian Apprenticeship Forum commissioned a research study called Understanding Substance Use Among Apprentices in the Skilled Trades. The purpose of the study was to better understand the lived experiences of apprentices and tradespeople. Some of the study's key findings will be discussed in this course.

Recommended for workers in the trades and also suitable for workers in organizations across all industries, the average time to complete this course is approximately 15 minutes.

For more information, please visit the [CCOHS website](#).

Climate Change Impacts on Work

Climate change (noun)
A long-term shift in weather conditions measured by changes in temperature, precipitation, wind, snow cover, and other indicators.

Identify hazards

- Assess existing and anticipated hazards through a climate change lens
- Engage your health and safety committee for recommendations on control measures

Create a hazard control plan

- Define extreme working conditions to help with recognition and awareness
- Outline how your workplace will respond to climate events
- Example: warming shelters or isolating workers from extreme conditions
- Define who's responsible for safety initiatives

Address the stress

- Acknowledge climate-related concerns, and discuss how both the workplace and individuals can take action
- Create an environment where employees can voice their concerns
- Share hope when you see it, like an encouraging news story or initiative
- Direct workers to mental health resources when they need it

Consider community

- In an emergency, can you collaborate with local government and emergency services to provide services or resources?
- What risks to public infrastructure will affect your workplace and your workers?

Climate change impacts workplaces and workers across all types of industries, but by anticipating and planning for impacts, workplaces will be more prepared.

- Operational disruptions
- Process safety changes
- Illnesses or injuries, heat stress, and hypothermia
- Spread of infectious diseases
- Increased stress and anxiety

Did you know?

Because of its northerly location, Canada experiences climate change at 2x the rate of the world's average.

— Canada's National Adaptation Strategy: A Healthy Environment and a Healthy Economy

Worried about climate change?

Feeling like you can't make a difference? It might be eco-anxiety.

Know how to spot the signs: depression, insomnia, hopelessness, and panic attacks, or feelings of loss, helplessness, frustration, or fatigue.

Canadian Centre for Occupational Health and Safety